IMPROVING AVIATION SAFETY: AN AIR TRAFFIC CONTROL PERSPECTIVE

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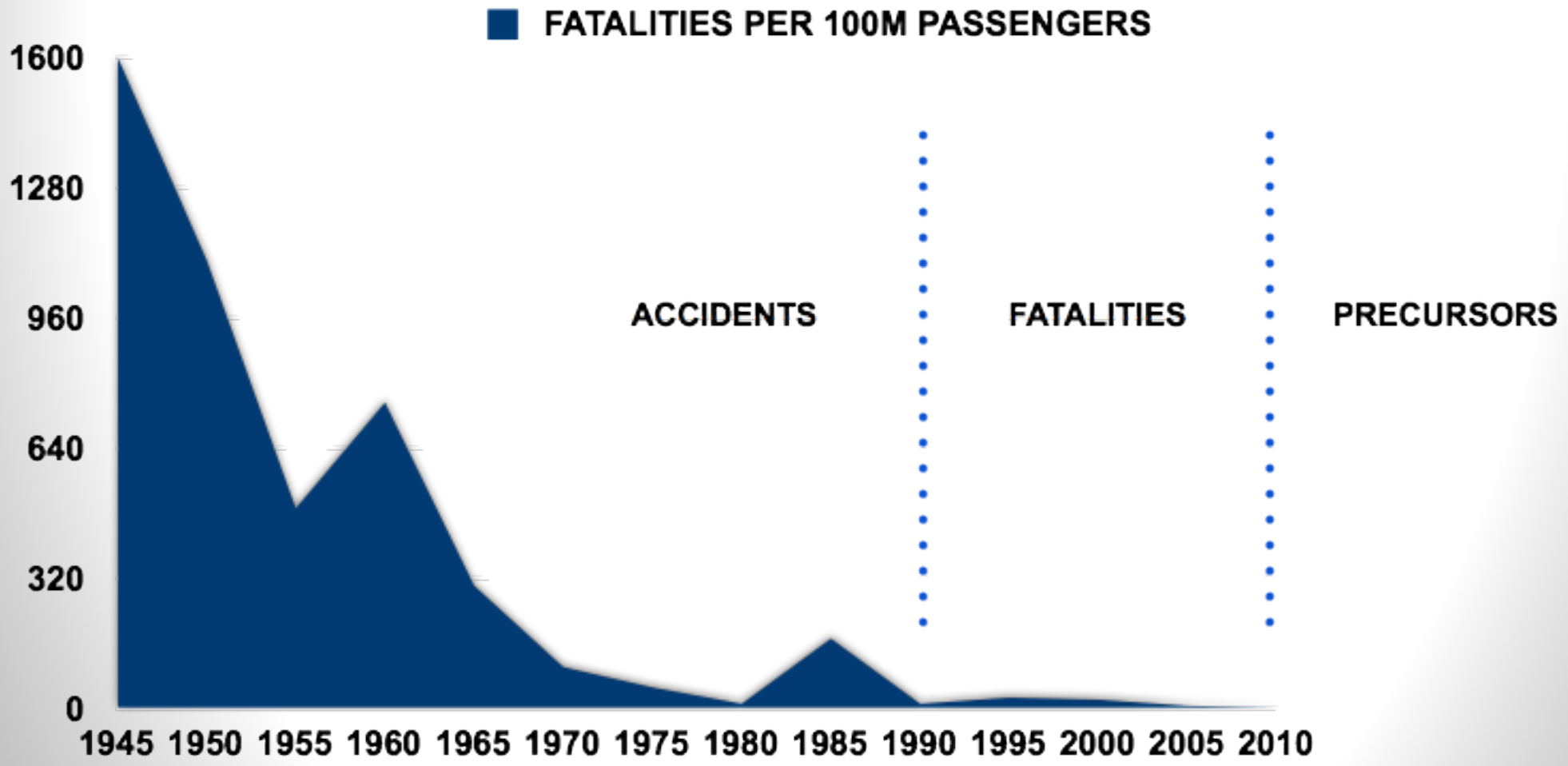
MAKING THE BEST BETTER



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INCIDENTS ARE RARE BUT IMPORTANT

- Incidents provide valuable data that we use to improve safety in the NAS
- Incidents are investigated and analyzed
- Corrective actions are taken to mitigate risk

DATA DATA DATA

- Waiting for incidents to become known is reactive
- Our Safety Management System is proactive
- We value and need more data

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SAFETY MANAGEMENT

PROACTIVE RISK MITIGATION

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I. VALUE EMPLOYEE SAFETY CONTRIBUTIONS

- Voluntary Safety Reporting Programs
  - ATSAP
  - T-SAP
- Partnership for Safety

II. IMPROVE TECHNOLOGY TO GATHER DATA

- TARP Software — provides an integral replay that displays events and their associated closest proximity

- CEDAR Software — facilitates reporting by managers

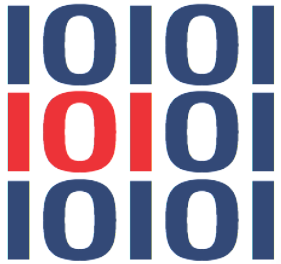
- DALR Software — enables replays with voice

- OEDP — OI Detection Program (En Route)

III. ANALYZE AND IDENTIFY RISK

- Identify Top 5 Hazards via Risk Analysis Process (RAP)
- Improve Quality Assurance, Quality Control and Reporting
- Align Analysis Coding across Multiple Data Sources
- Identify Trends

ANALYZE



IDENTIFY

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IV. EMBRACE CORRECTIVE ACTION

- Create an Adaptive Culture
- Become a Learning Organization
- Identify the Top 5
- Issue Corrective Action Plans

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OUR SAFETY MANAGEMENT SYSTEM

OUR SAFETY MANAGEMENT SYSTEM

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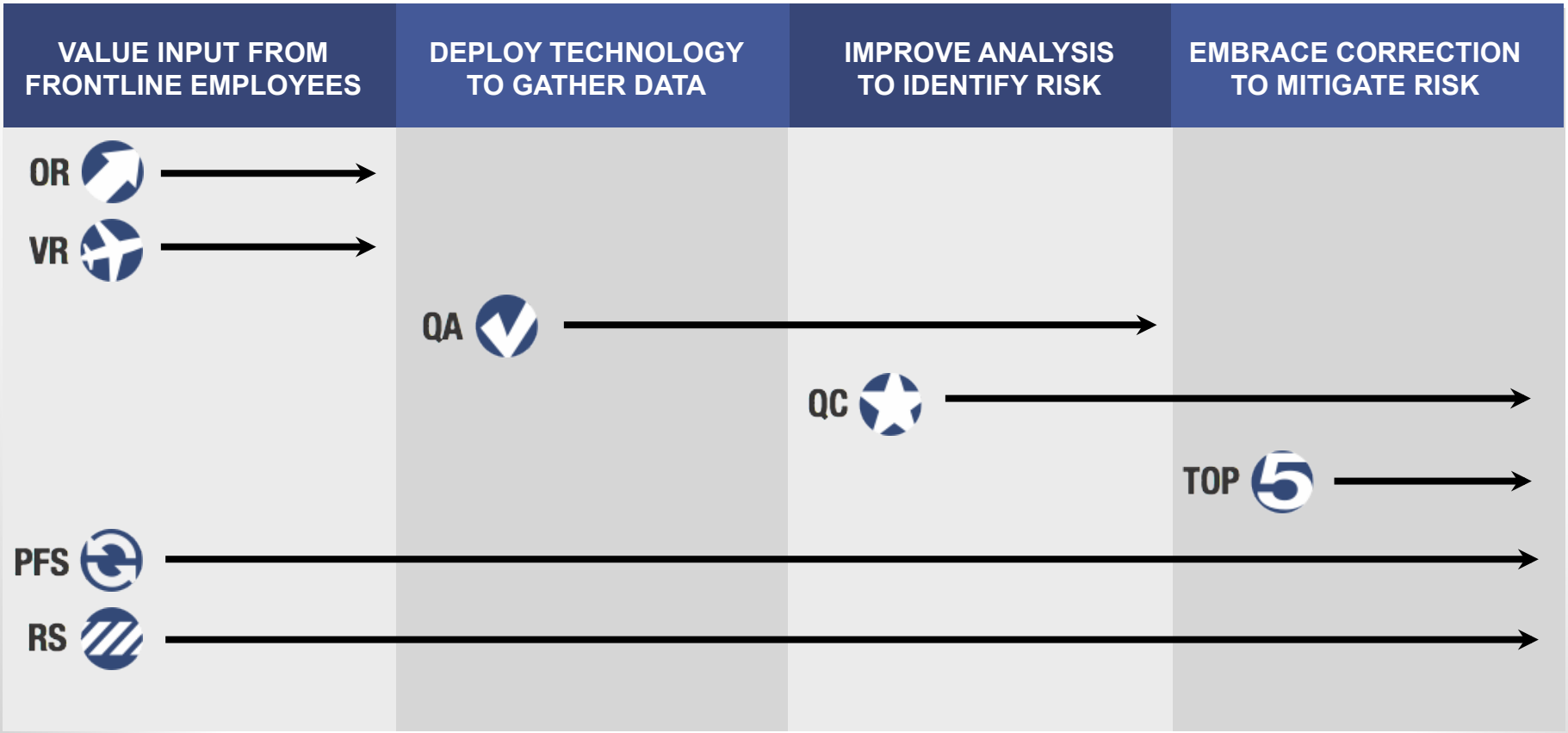
SAFETY STRATEGY



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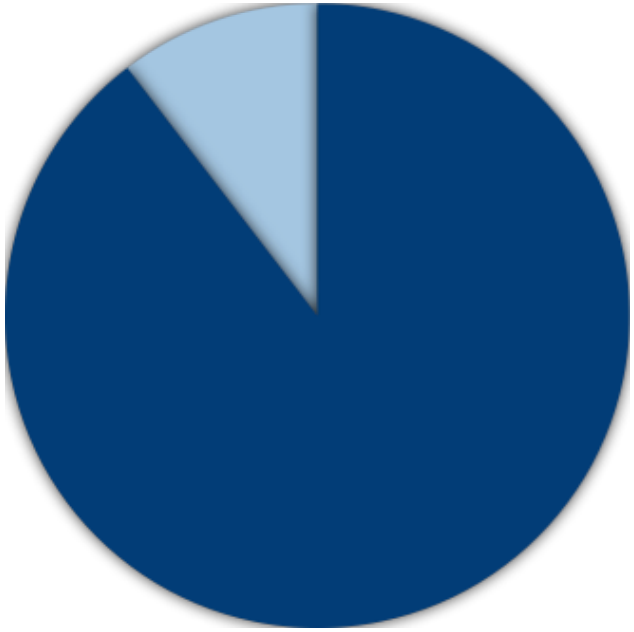
REACTIVE AND PROACTIVE DATA

REACTIVE (LEGACY)

5,000

Approximate operational incidents over 3 years



PROACTIVE (SMS)

58,000

- 58,000 Voluntary Reports
  - 160 ATSAP Positives
  - 91 Corrective Action Requests
  - 60% of Controllers have filed a report
  - 300-350 reports/week
- Top 5 Hazards
  - 19 Corrective Actions

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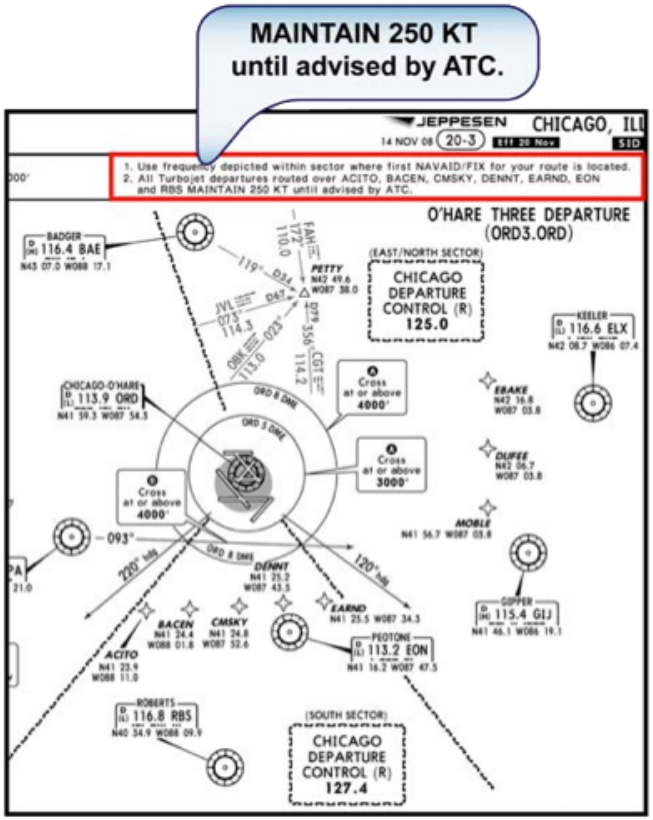
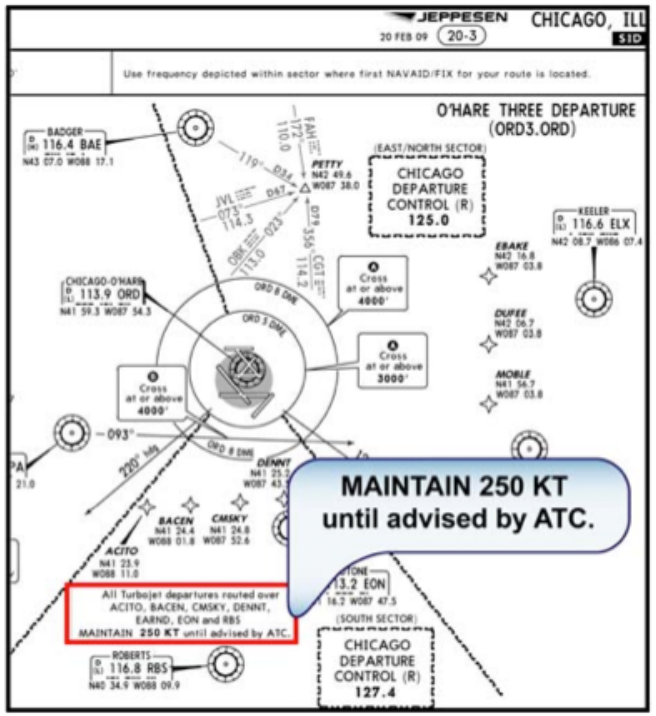
ATSAP POSITIVE: DEPARTURE NAVIGATION CHART FIX



BEFORE



AFTER

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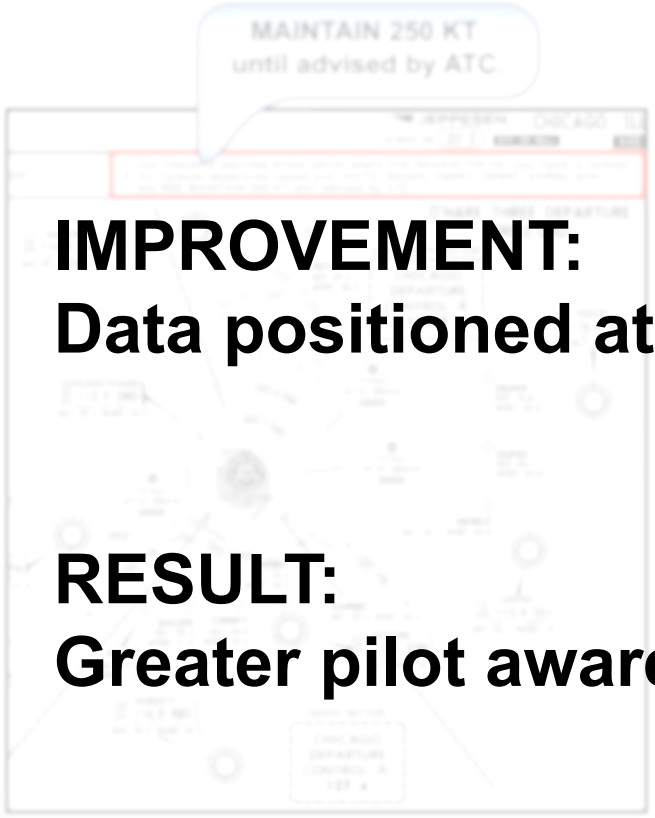
ATSAP POSITIVE: DEPARTURE NAVIGATION CHART FIX



BEFORE

AFTER

IMPROVEMENT:
Data positioned at relevant location

RESULT:
Greater pilot awareness

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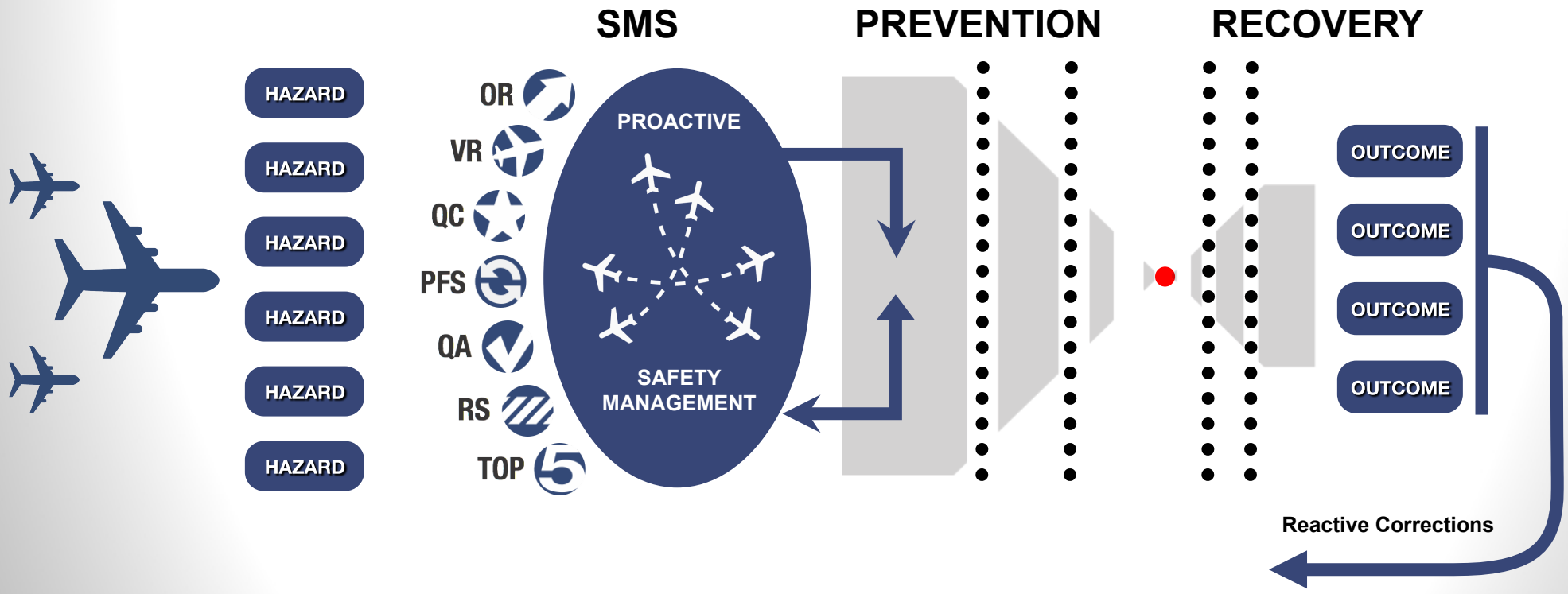
PROACTIVE AND REACTIVE CONTROLS



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2013 TOP 5

- Recovery
- Traffic Advisories/Safety Alerts
- Failure to Monitor Initial Departure Heading
- Similar Sounding Call Signs
- Conflicting Procedures

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IMPROVING AVIATION SAFETY:
AN AIR TRAFFIC CONTROL PERSPECTIVE

www.faa.gov/go/atosafety

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